

**ORDER**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

SEI-2400

6500.13

9/17/85

**DOCUMENTATION CONTROL CENTER**  
OCT 30 1985

SUBJ: IMPLEMENTATION OF 25 kHz CHANNEL SPACING IN THE VHF BAND  
(118.0 TO 136.0 MHz)

1. PURPOSE. This order directs that all very high frequency (VHF) receiver equipment supporting aircraft-to-ground assigned frequencies from 118.0 to 136.0 megahertz (MHz) be converted to 25 kilohertz (kHz) channel spacing, except those receivers supporting the emergency frequency 121.5 MHz.
2. DISTRIBUTION. This order is distributed to division level in the Air Traffic Operations, Air Traffic Plans and Requirements, Program Engineering and Maintenance, Systems Engineering, and Acquisition and Materiel Services in Washington headquarters; to branch level in the regional Airway Facilities divisions; to branch level in the FAA Academy and FAA Depot at the Mike Monroney Aeronautical Center; to branch level in the Facilities and Engineering divisions at the FAA Technical Center; and to all Airway Facilities field offices and Air Traffic field offices.
3. BACKGROUND. This is a continuation of FAA's policy to replace and/or convert all analog voice radio communications system equipment to support 25 kHz spaced channels. This policy was initiated in channels assigned to high altitude en route sectors. AF P 6500.1, Change 361, dated 1/28/83, CHAPTER 356 CORRECTIONS TO VHF/UHF RECEIVER, AN/GRR-23/24 INSTRUCTION BOOK, transmits revised pages to instruction book TI 6620.2A for Radio Receivers AN/GRR-23 and AN/GRR-24. In 1985, the 25 kHz policy was extended to include all assigned frequencies, except 121.5 MHz in the band 118.0 to 136.0 MHz, and continues on a case-by-case basis. Solid-state receivers ordered prior to CY-80 were equipped with 50 kHz intermediate frequency (IF) crystal filters that will require replacement. Receivers ordered after CY-80 may be equipped with 25 kHz IF crystal filters and may not require replacement.
4. ACTION. The Airway Facilities division managers shall take actions to ensure implementation of 25 kHz channel spacing in the VHF band 118.0 to 136.0 MHz by accomplishment of actions a through g. The FAA Depot, AAC-400, shall take actions to ensure the accomplishment of actions h through i. The National Airway Engineering Field Support Sector, APM-150, shall take action to ensure the accomplishment of action j.
  - a. Conversion of all receivers, operating on assigned frequencies in the band 118.0 to 136.0 MHz and used for aircraft-to-ground communications, to 25 kHz channel spacing. AF P 6500.1, Change 361, dated 1/28/83, CHAPTER 356 CORRECTIONS TO VHF/UHF RECEIVER, AN/GRR-23/24 INSTRUCTION BOOK, transmits revised pages to instruction book TI 6620.2A for Radio Receivers AN/GRR-23 and AN/GRR-24.
  - b. Identification of equipment, determination of VHF receiver IF crystal filter quantities needed, and ordering of filters. VHF receiver filter replacements (NSN 5915-01-073-0231) for AN/GRR-23 receivers are available from operational stock. Due to limited stock, organizations should order only

Distribution: A-W (PM/ES/TO/TR/LG)-2; A-X (AF)-3;  
A-Y (AY/DE)-3; A-Z (AN/EN)-3;  
A-FAF-0 (STD); A-FAT-0 (STD)

Initiated By: APM-540

sufficient quantities to support channel A and channel B (formerly main and standby) receivers serving assigned frequencies.

c. Marking of all 50 kHz IF filters in the 121.5 MHz guard channel receivers with bright orange paint for positive identification. A transmission free buffer channel is retained on each side of 121.5 MHz. Receivers serving the emergency guard channel shall retain their 50 kHz IF filters. Supply permitting, following completion of the implementation described in paragraph 4.b channel A and channel B, 25 kHz IF crystal filters shall be obtained for and retained with the guard receivers. Should the guard receiver be used on a different air/ground channel, the 25 kHz IF crystal shall then replace the 50 kHz IF crystal.

d. Completion of the implementation of 25 kHz channel spacing in the VHF band (118.0 to 136.0 MHz) in accordance with the following schedule:

<u>Facility</u>	<u>Completion Date</u>
ARTCC/RCAG, etc.	June 1986
ATCT/RTR, etc.	September 30, 1986
FSS/RCO, etc.	September 30, 1987

e. Ensure that the facilities master file (FMF) is updated to reflect the current status of this equipment configuration and its location.

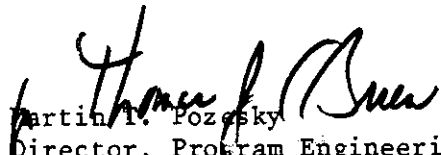
f. Ensure that surplus 50 kHz IF crystal filters will not be relocated or installed at other sites, except 121.5 MHz. Refer to paragraph 4.c for 121.5 MHz guide lines. Disposal of any surplus filters should be in accordance with current procedures of Order 4800.2A, Utilization and Disposal of Excess and Surplus Personal Property.

g. Validation of 25 kHz channel compatibility (contains 25 kHz IF crystal filter) every time a VHF receiver is received. If not, take action in accordance with the previous paragraphs.

h. The FAA depot will no longer support the field for VHF receiver 50 and 100 kHz filters, except 121.5 MHz, on exchange and repair (E & R), logistics, parts replacement, and overhaul. Refer to paragraph 4.f for disposal instructions.

i. Ensure that appropriate provisioning technical documentation is updated to include the earlier actions.

j. Review the appropriate instruction manual(s) to ensure the former action is included in the manual.

  
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and Maintenance Service